

AMENDMENT TO CLAIMS

[Deleted material is struck-through and added material is underlined]

1. (Currently Amended) Electroluminescent phosphor comprising:
 - a host material which ~~can be~~ is represented by the formula $\text{ZnS} \cdot a\text{AO}$, wherein “A” is at least one element selected from among magnesium (Mg), calcium (Ca), strontium (Sr), and barium (Ba), and “a” ranges from 0.001 to 0.01;
 - either one of or both copper (Cu) or manganese (Mn) as an activator; and
 - at least one element selected from among chlorine (Cl), bromine (Br), iodine (I), and aluminum (Al) as a co-activator.
2. (Currently Amended) An electroluminescent phosphor production method comprising:
 - a primary firing process for firing at a temperature in the range of 1150 to 1350 °C a mixture produced by adding to zinc sulfide (ZnS):
 - at least one kind of compounds selected from among copper compounds and manganese compounds as a material of an activator,
 - at least one kind of compounds selected from among halides and aluminum compounds as a material of a co-activator,
 - at least one kind of compounds selected from among alkaline earth metal oxides and compounds that change into alkaline earth metal oxides when fired, and
 - a halide or halides serving as a crystal growing agent;
 - an intermediate manufacturing process for producing an intermediate by washing, filtrating, and drying a fired substance resulting from the primary firing process;
 - a secondary firing process for crystal transformation of a part of the intermediate produced from the intermediate manufacturing process **wherein at least part of said intermediate is crystal transformed from an α -crystal structure to a β -crystal structure, by copper sulfate (CuSO_4) and/or zinc sulfate (ZnSO_4) being mixed with said intermediate;**
 - and
 - an etching process for etching the intermediate fired by the secondary firing process.
3. (Currently Amended) An electroluminescent phosphor production method as claimed in claim 2, wherein **in the primary firing process:**
 - magnesium oxide (MgO) is used as an alkaline earth metal oxide, and
 - at least one of the compounds selected from among magnesium carbonate (MgCO_3), basic magnesium carbonate, calcium carbonate (CaCO_3), calcium hydroxide (Ca(OH)_2),

strontium carbonate (SrCO_3), strontium nitrate ($\text{Sr}(\text{NO}_3)_2$), barium carbonate (BaCO_3), and barium oxalate (BaC_2O_4) is used as a compound that changes into an alkaline earth metal oxide when fired.